# 3.4 33 Mile Loop Trail Upgrades

USAG-AK has proposed road upgrades located along 33 Mile Loop Trail, approximately 7-10km south of Delta Junction and 1km west of the Richardson Highway between Eddy Drop Zone and Fleet Street at Fort Wainwright's DTA.

The proposed upgrades will allow for travel during wet times of the year and will consist of two parts: one west of the "shortcut" hill and one east of it. The western section has one stretch adjacent to Eddy Drop Zone that is rutted and has never been upgraded but is passable most of the year and another section that was severely impacted by the spring 2004 floods. These sections will be graded, compacted, have gravel added in 6in. lifts where needed and be compacted again. Cutouts may be needed on the low side of the road to prevent water from ponding on the road. Three grouted low water crossings will also be installed. Two will be improvements to existing low water crossings in the area where the road was damaged during the 2004 flood and the third one will replace the culverts at the base of "shortcut" hill. Existing berms on the south side of the road, in the damaged area, and at the location of the two existing low water crossings need to be opened up to a minimum width of 100ft. Material removed from the berm will be used in one of two places. It can be added to the remaining section of berm or the material can be used to assist in directing the water into the opened up areas. Most of the work will be completed in the original footprint of the road. The removal of portions of the berm and installation of cutouts may extend the work outside the original footprint of the road.

The eastern section of the trail has several mud holes that have been detailed for repair. The proposed upgrade includes five mud hole repairs along 0.8 miles of trail. Generally, the treatment at each site calls for grading the trail, installing geotextile and then building up the roadbed to raise it above the level of water that accumulates in these mud holes. Gravel will be utilized from nearby sources and will be added and compacted in 6in. lifts. The two possible gravel sources for this project have been surveyed and the State Historic Preservation Office (SHPO) has concurred with USAG-AK's findings that no sites are located within these sources (Sackett 2000 and Robertson 2003). Some of the areas to be upgraded call for the installation of culverts. In addition, three or four of the ridge tops that the trail crests are too peaked to allow for vehicles with long trailers to pass. These sites will be leveled the minimum necessary to allow for safe travel. The remaining portions of trail are on natural gravel substrate and will only require grading and crowning. There is one archaeological site near the project area that will be protected from damage

. Most of the work will be performed in the original road footprint. The only work that may be performed outside the footprint would be the cutouts.

The objective of this project is to improve the mud holes, reduce the sharp peaks, and grade the remaining portions of this short section of trail. The mud holes make it almost impossible for wheeled vehicles to drive on 33 Mile Loop Trail without getting stuck or making side cuts around them. This "road propagation" widens the existing trail and degrades large amounts of land.

## Surveys and Field Methods

In the summers of 2002, 2003 and 2004, two archaeological survey crews (each comprised of four archaeologists) employed by CEMML conducted a pedestrian survey

in the area of the proposed road upgrades along 33 Mile Loop Trail. The project's APE encompassed an area larger than the anticipated construction footprint, in order to ensure coverage of areas that may incur secondary impacts during construction or use. No archaeological sites were observed inside the APE.

Survey methods consisted of parallel pedestrian transects spaced at 20m walked systematically across the APE and surrounding area. Transect survey units were partitioned according to existing roads and trails where possible. When existing roads did not provide for practical unit boundaries, a one square kilometer work unit was defined. Systematic subsurface shovel testing was undertaken in areas considered to have high probability for containing archaeological sites. Areas that were shovel tested included but were not limited to: landforms affording a view of surrounding terrain; lake margins; ridgelines; terrace edges; hilltops; benches adjacent to steeper slopes and bluffs. Shovel tests were typically 30cm in diameter and excavated into glacial till or consolidated outwash. All soil removed was screened through ½in. hardware cloth.

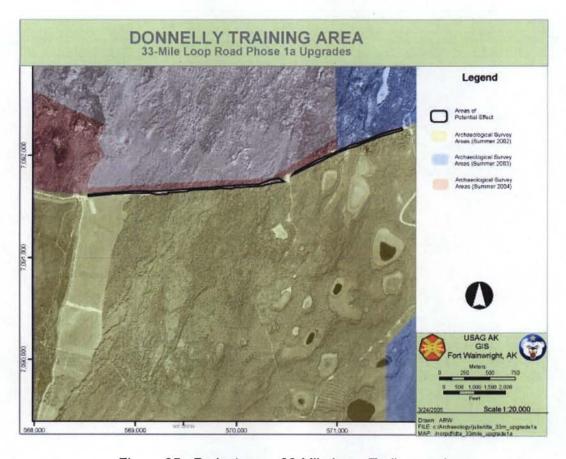


Figure 85. Project area, 33 Mile Loop Trail upgrades

#### Results

Pedestrian survey of the proposed project area failed to identify any cultural resources within the boundaries of the proposed project's APE. All previously recorded archaeological sites or historic properties fall outside the proposed project area. Most of the work will be completed in the original footprint of the road. Subsequently, the proposed project will have no effect on historic properties. The two possible sources of the gravel for this project have been surveyed and the SHPO has concurred with the

findings that no historic properties are located within these sources (Sackett 2000 and Robertson 2003).

## **Cultural Resources**

Twelve prehistoric sites (XMH-00290, XMH-00291, XMH-00895, XMH-00896, XMH-00897, XMH-00898, XMH-00899, XMH-00901, XMH-00980, XMH-00992, XMH-00994, and XMH-00999) have been previously recorded within 1km of the proposed project area (Figure 85). However, only three of these sites (XMH-00290, XMH-00291, XMH-00895) are the proposed project area. The following are descriptions of the three sites near the currently proposed project area.

# XMH-00290

Site XMH-00290 is located on the , at the intersection of 33 Mile Loop Trail and an unnamed trail. The site was identified in 1978 and consists of numerous flakes and two biface fragments (Holmes 1979). This site was revisited in 2004 for this project and no new artifacts were located. The correct UTM coordinates for the site are:

## Recommendations

This site falls outside of the APE for the proposed project and no further action is recommended at this time.

# XMH-00291

Site XMH-00291 is located on a glacial moraine knoll, east of the intersection of
. The site was identified in 1978 and consists of two
chert flakes found on the surface (Holmes 1979). This site was revisited in 2002 for this
project and no new artifacts were located. The correct UTM coordinates for the site are:

#### Recommendations

This site falls outside of the APE for the proposed project and no further action is recommended at this time.

## XMH-00895

Site XMH-00895 is located at glacial moraine, 20m to the north of a north/south trending ridge of a glacial moraine, 20m to the north of approximately 250m to the south and is roughly 500m to the east. The site was identified in 2002 and consists of single unifacially worked banded chert flake found on the surface of the at the base of a moraine and to the north of

(Hedman et al. 2003). This site was revisited in 2004 for this project and one biface fragment and two more flakes were located on the top of the moraine. The correct UTM coordinates for the site are:

### Recommendations

This site falls outside of the area of potential effect for the proposed project. While the site does not fall within the boundaries of this project, its close proximity may expose it to secondary impacts from the road construction. To protect the site from any inadvertent damage during construction and any subsequent military training,

. The DTA archaeologist will be on site to monitor the construction for this project.